Data Center Networking
Solutions Brief

From digital services to data center consolidation, federal agencies need higher levels of IT performance and agility to meet mission objectives, deliver services to citizens, and protect national interests—all with greater efficiency and flexibility than ever before. Providing agency and department staff with anywhere, anytime access to key insights and critical resources is placing new pressures on the data center, driving the need for high performance networking.

THE CHALLENGE

Most data centers were built to optimize the delivery of client/server applications, but as Federal IT continues to virtualize servers and applications, legacy network architectures are straining under the new requirements for high performance and agility. Virtualization fundamentally changes traffic patterns in the data center, with the heaviest loads occurring between servers and across data centers, rather than from server to client as with legacy applications.

Federal IT staff needs the ability to automatically move virtual workloads not only within a data center pod, but also across geographically dispersed data centers— without manual and time-consuming network reconfiguration. Data center performance must scale gracefully. Demanding applications, powerful compute, and massive storage volumes are driving the need for 40GbE, 100GbE, and beyond. To deliver the necessary levels of performance and availability, the data center network must become faster, more agile, and more scalable. Integration between the physical and virtual layers is essential as Federal advances its use of virtualization. Many agencies have begun their cloud journey, but they must support legacy applications and multitenant private data centers for the foreseeable future. With budget constraints an ongoing issue, Federal IT must find new ways to lower capital expenses and operational expenses. A network that is vastly simpler to operate relieves the operational burden on IT staff and lowers these costs.

PRESIDIO® FEDERAL

SOLUTION

ENSURING PLANNING AND VISIBILITY ACROSS YOUR AGENCIES NETWORK

We deliver on the vision of the Virtual Cloud Network with a complete virtual network infrastructure delivered in software with a portfolio essentially creating an easy button for connecting and protecting workloads for the business, developers, and so on. It can deliver more operational speed and agility, simplified compliance, increased competitiveness, and increased revenue. This can only be done in software - providing consistent networking from end to end. Because the network is all delivered in software, it brings together programmability, agility, and adaptability that enables organizations to move faster based on applications that they are deploying and managing.

Security and Zero Trust are built in as opposed to being bolted on. This is key, as the old rule of perimeter security evolved from building a perimeter around a data center to one that is application and data centric. It's about building consistency in the network and security policy for data and applications regardless of where they are running. In this way, security follows the application, rather than the other way round.

KEY BENEFITS

Accelerating the journey to micro-segmentation and network virtualization across clouds and ensure these key benefits:

- *Accelerate* micro-segmentation deployment
- *Troubleshoot security* for SDDC, native AWS, and hybrid applications
- *Minimize business risk* during application migration
- *Reduce mean time* to resolution for application-connectivity issues
- *Optimize application performance* by eliminating network bottlenecks
- *Audit* network and security changes over time
- *Scale* across multiple managers
- *Boost uptime* by proactively detecting misconfiguration errors
- *Ensure* compliance

WHY PRESIDIO FEDERAL

Presidio Federal is a purpose-built and mission-driven IT services and solutions provider dedicated to serving the federal government. We leverage our wealth of experience and deep relationships across our partner ecosystem, creating an environment of active collaboration and real-time responsiveness.

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